

FINAL DRAFT/PROPOSED CAAPP PERMIT
LSP Kendall Energy, LLC
I.D. No.: 093808AAD
Application No.: 03030002
October 8, 2003

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

LSP Kendall Energy, LLC
Attn: James Idzorek
901 Marquette Avenue - Suite 2300
Minneapolis, Minnesota 55402

<u>Application No.:</u> 03030002	<u>I.D. No.:</u> 093808AAD
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 03, 2003
<u>Operation of:</u> Electric Generation	
<u>Date Issued:</u> TO BE DETERMINED	<u>Expiration Date</u> ² : DATE
<u>Source Location:</u> 1401 County Line Road, Minooka, Seward, IL 60447	
<u>Responsible Official:</u> Michael Skinner/Regional Director	

This permit is hereby granted to the above-designated Permittee to OPERATE an electric power generation plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

The current federal Phase II Acid Rain Permit issued to Kendall Energy by the Illinois EPA is incorporated into this CAAPP permit (See Attachment 3).

If you have any questions concerning this permit, please contact Ross Cooper at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RWC:JRC:psj

cc: Illinois EPA, FOS, Region 1
CES
Lotus Notes

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

LSP Kendall Energy, LLC
1401 County line Road
Minooka, Illinois 60447
612/373-5300

I.D. No.: 093808AAD
Acid Rain Permit ORIS Code No.: 55131

Standard Industrial Classification: 4911, Electric Generation

1.2 Owner/Parent Company

LSP Kendall Energy, LLC
901 Marquette Avenue - Suite 2300
Minneapolis, Minnesota 55402

1.3 Operator

LSP Kendall Energy, LLC
1401 County line Road
Minooka, Illinois 60447

James Idzorek/Environmental Contact
612/373-5300

1.4 General Source Description

LSP Kendall Energy, LLC is located at 1401 County Line Road. The source utilizes four natural gas turbines with heat recover steam generators (HSRG) to generate electricity. In addition, the turbines and HSRGs control NO_x with low NO_x burners and selective catalytic reduction (SCR) systems.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a) (1) and 201.211, as follows:

Diesel Fuel truck Unloading

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a) (2) or (a) (3), as follows:

Ammonia Tank

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a) (4)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a) (11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a) (16)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability,

such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.182, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 1	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR1
HRSG 1	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR1
Unit 2	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR2
HRSG 2	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR2
Unit 3	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR3
HRSG 3	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR3
Unit 4	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR4
HRSG 4	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR4
GHS-1	Natural Gas Fired Heater (15.0 mmBtu/hr)	June 1999	Low NO _x Burners
T1-T18	Cooling Tower Cells	June 1999	Drift Eliminators

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO_x, CO, NO_x, VOM, PM, and HAP emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source pursuant to 40 CFR 68.215(a)(2)(i) and (ii), as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

- 5.2.5 a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B that was promulgated after the date issued of this permit.
- c. This stationary source will be subject to 40 CFR Part 63 when such rule becomes final and effective. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such

regulation as part of the annual compliance certification required by Condition 9.8 beginning in the year that compliance is required under a final and effective rule.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section.

5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. As a result of this application either not having been submitted or deemed complete by April 20, 1998, the source is required to comply with the requirements of 40 CFR Part 64 for large pollutant-specific emissions units in the initial application and CAAPP permit. The source must submit a CAM plan for all other affected pollutant-specific emissions units upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	474.35
Sulfur Dioxide (SO ₂)	216.04
Particulate Matter (PM)	590.08
Nitrogen Oxides (NO _x)	611.93
HAP, not included in VOM or PM	---
Total	1892.4

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7) (b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for HAP Emissions

- a. Emissions of HAPs, ton/mo and ton/yr.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

- a. The annual emissions of individual HAPs for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and
- b. The total emissions of all HAPs combined for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSIONS CONTROL PROGRAMS

6.1 NO_x Trading Program

6.1.1 Description of NO_x Trading Program

The NO_x Trading Program is a regional "cap and trade" market system for large sources of NO_x emissions in the eastern United States, including Illinois. It is designed to reduce and maintain NO_x emissions from the emission units covered by the program within a budget to help contribute to attainment and maintenance of the ozone ambient air quality standard in the multi-state region covered by the program, as required by Section 126 of the CAA. The NO_x Trading Program applies in addition to other applicable requirements for NO_x emissions and in no way relaxes these other requirements.

Electrical generating units (EGU) that are subject to the NO_x Trading Program are referred to as "budget EGU." Sources that have one or more EGU or other units subject to the NO_x Trading Program are referred to as budget sources.

The NO_x Trading Program controls NO_x emissions from budget EGU and other budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. (In 2004, the first year that the NO_x Trading Program is in effect, the control period will be May 31 through September 30.) By November 30 of each year, the allowance transfer deadline, each budget source must hold "NO_x allowances" for the actual NO_x emissions of its budget units during the preceding control period. The USEPA will then retire NO_x allowances in the source's accounts in amounts equivalent to its seasonal emissions. If a source does not have sufficient allowances in its accounts, USEPA would subtract allowances from the source's future allocation for the next control period and impose other penalties as appropriate. Stringent monitoring procedures developed by USEPA apply to budget units to assure that actual emissions of NO_x emissions are accurately determined.

The number of NO_x allowances available for budget sources is set by the overall budget for NO_x emissions established by USEPA. This budget requires a substantial reduction in NO_x emissions from historical levels as necessary to meet air quality goals. In Illinois, existing budget sources initially receive their allocation or share of the NO_x allowances budgeted for EGU in an amount determined by rule [35 IAC Part 217, Appendix F]. Between 2007 and 2011, the allocation mechanism for existing EGU gradually shifts to one based on the actual operation of EGU in

preceding control periods. New budget EGU, for which limited operating data may be available, may obtain NO_x allowances from the new source set-aside (NSSA), a portion of the overall budget reserved for new EGU.

In addition to directly receiving or purchasing NO_x allowances as described above, budget sources may transfer NO_x allowances from one of their units to another. They may also purchase allowances in the marketplace from other sources that are willing to sell some of the allowances that they have received. Each budget source must designate an account representative to handle all its allowance transactions. The USEPA, in a central national system, will maintain allowance accounts and record transfer of allowances among accounts.

The ability of sources to transfer allowances will serve to minimize the costs of reducing NO_x emissions from budget units to comply with the overall NO_x budget. In particular, the NO_x emissions of budget units that may be most economically controlled will be targeted by sources for further control of emissions. This will result in a surplus of NO_x allowances from those units that can be transferred to other units at which it is more difficult to control NO_x emissions. Experience with reduction of sulfur dioxide emissions under the federal Acid Rain program has shown that this type of trading program not only achieves regional emission reductions in a more cost-effective manner but also results in greater overall reductions than application of traditional emission standards to individual emission units.

The USEPA developed the plan for the NO_x Trading Program with assistance from affected states. Illinois' rules for the NO_x Trading Program for EGU are located at 35 IAC Part 217, Subpart W, and have been approved by the USEPA. These rules provide for interstate trading of NO_x allowances, as mandated by Section 9.9 of the Act. Accordingly, these rules refer to and rely upon federal rules at 40 CFR Part 96, which have been developed by USEPA for certain aspects of the NO_x Trading Program, and which an individual state must follow to allow for interstate trading of allowances.

Note: This narrative description of the NO_x Trading Program is for informational purposes only and is not enforceable.

6.1.2 Applicability

- a. The following emission units at this source are budget EGU for purposes of the NO_x Trading Program. Accordingly, this source is a budget source and the Permittee is the owner or operator of a budget source

and budget EGU. In this section of this permit, these emission units are addressed as budget EGU.

Unit 1 with HSRG 1, Unit 2 with HSRG 2, Unit 3 with HSRG 3, Unit 4 with HSRG 4

- b. This permit does not provide "low-emitter status" for the above emission units pursuant to 35 IAC 217.754(c).

6.1.3 General Provisions of the NO_x Trading Program

- a. This source and the budget EGU at this source shall comply with all applicable requirements of Illinois' NO_x Trading Program, i.e., 35 IAC Part 217, Subpart W, and 40 CFR Part 96 (excluding 40 CFR 96.4(b) and 96.55(c), and excluding 40 CFR 96, Subparts C, E and I), pursuant to 35 IAC 217.756(a) and 217.756(f) (2).
- b. Any provision of the NO_x Trading Program that applies to a budget source (including any provision applicable to the account representative of a budget source) shall also apply to the owner and operator of such budget sources and to the owner and operator of each budget EGU at the source, pursuant to 35 IAC 217.756(f) (3).
- c. Any provision of the NO_x Trading Program that applies to a budget EGU (including any provision applicable to the account representative of a budget EGU) shall also apply to the owner and operator of such budget EGU. Except with regard to requirements applicable to budget EGUs with a common stack under 40 CFR 96, Subpart H, the owner and operator and the account representative of one budget EGU shall not be liable for any violation by any other budget EGU of which they are not an owner or operator or the account representative, pursuant to 35 IAC 217.756(f) (4).

6.1.4 Requirements for NO_x Allowances

- a. Beginning in 2004, by November 30 of each year, the allowance transfer deadline, the account representative of each budget EGU at this source shall hold allowances available for compliance deduction under 40 CFR 96.54 in the budget EGU's compliance account or the source's overdraft account in an amount that shall not be less than the budget EGU's total tons of NO_x emissions for the preceding control period, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, Subpart H, plus any number necessary to account for actual utilization (e.g., for testing, start-up,

malfunction, and shut down) under 40 CFR 96.42(e) for the control period, pursuant to 35 IAC 217.756(d)(1). For purposes of this requirement, an allowance may not be utilized for a control period in a year prior to the year for which the allowance is allocated, pursuant to 35 IAC 217.756(d)(5).

- b. The account representative of a budget EGU that has excess emissions in any control period, i.e., NO_x emissions in excess of the number of NO_x allowances held as provided above, shall surrender allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 201.756(f)(5). In addition, the owner or operator of a budget EGU that has excess emissions shall pay any fine, penalty, or assessment, or comply with any other remedy imposed under 40 CFR 96.54(d)(3) and the Act, pursuant to 35 IAC 217.756(f)(6). Each ton of NO_x emitted in excess of the number of NO_x allowances held as provided above for each budget EGU for each control period shall constitute a separate violation of 35 IAC Part 217 and the Act, pursuant to 35 IAC 217.756(d)(2).
- c. An allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program is a limited authorization to emit one ton of NO_x in accordance with the NO_x Trading Program. As explained by 35 IAC 217.756(d)(6), no provisions of the NO_x Trading Program, the budget permit application, the budget permit, or a retired unit exemption under 40 CFR 96.5 and no provision of law shall be construed to limit the authority of the United States or the State of Illinois to terminate or limit this authorization. As further explained by 35 IAC 217.756(d)(7), an allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program does not constitute a property right. As provided by 35 IAC 217.756(d)(4), allowances shall be held in, deducted from, or transferred among allowances accounts in accordance with 35 IAC Part 217, Subpart W, and 40 CFR 96, Subparts F and G.

6.1.5 Monitoring Requirements for Budget EGU

- a. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget EGU and the compliance of each budget EGU with the emission limitation under Condition 6.1.4(a) shall be determined by the emission measurements recorded and reported in accordance with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.756(c)(1), (c)(2) and (d)(3).

- b. The account representative for the source and each budget EGU at the source shall comply with those sections of the monitoring requirements of 40 CFR 96, Subpart H, applicable to an account representative, pursuant to 35 IAC 217.756(c) (1) and (d) (3).

Note: Pursuant to 40 CFR 96.70(b), new budget EGU that commence operation before January 1, 2003 are to begin complying with applicable monitoring requirements of 40 CFR Part 96 at least one year in advance of the start of the first control period governed by the NO_x Trading Program.

6.1.6 Recordkeeping Requirements for Budget EGU

Unless otherwise provided below, the Permittee shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This 5-year period may be extended for cause at any time prior to the end of the 5 years, in writing by the Illinois EPA or the USEPA.

- a. The account certificate of representation of the account representative for the source and each budget EGU at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 40 CFR 96.13, as provided by 35 IAC 217.756(e) (1) (A). These certificates and documents must be retained on site at the source for at least 5-years after they are superseded because of the submission of a new account certificate of representation changing the account representative.
- b. All emissions monitoring information, in accordance with 40 CFR 96, Subpart H, (provided that to the extent that 40 CFR 96, Subpart H, provides for a 3-year period for retaining records, the 3-year period shall apply), pursuant to 35 IAC 217.756(e) (1) (B).
- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Trading Program or documents necessary to demonstrate compliance with requirements of the NO_x Trading Program, pursuant to 35 IAC 217.756(e) (1) (C).
- d. Copies of all documents used to complete a budget permit application and any other submission under the NO_x Trading Program, pursuant to 35 IAC 217.756(e) (1) (D).

6.1.7 Reporting Requirements for Budget EGU

- a. The account representative for this source and each budget EGU at this source shall submit to the Illinois EPA and USEPA the reports and compliance certifications required under the NO_x Trading Program, including those under 40 CFR 96, Subparts D and H, and 35 IAC 217.774, pursuant to 35 IAC 217.756(e) (2).
- b. Notwithstanding the provisions in Conditions 9.8 and 9.9 of this CAAPP permit, these submittals need only be signed by the designated representative, who may serve in place of the responsible official for this purpose, as provided by Section 39.5(1) of the Act, and submittals to the Illinois EPA need only be made to the Illinois EPA, Air Compliance Section.

6.1.8 Allocation of NO_x Allowances to Budget EGU

- a. For 2004, 2005 and 2006, the budget EGU identified in Condition 6.1.2(a) will not be entitled to direct allocations of NO_x allowances because these EGU will be considered "new" budget EGU, as defined in 35 IAC 217.768(a) (1).
- b.
 - i. Beginning in 2007, these budget EGU will cease to be "new" budget EGU and the source will be entitled to an allocation of NO_x allowances for these budget EGU as provided in 35 IAC 217.764. For example, for 2007, the allocation of NO_x allowances will be governed by 35 IAC 217.764(b) (2) and (b) (4).
 - ii. In accordance with 35 IAC 217.762, the theoretical number of NO_x allowances for these budget EGU, calculated as the product of the applicable NO_x emissions rate and heat input as follows, shall be the basis for determining the allocation of NO_x allowances to these EGU:
 - A. As provided by 35 IAC 217.762(a) (2), the applicable NO_x emission rate for these EGU is 0.0936 lb/mmBtu. This is the permitted emission rate for these EGU as contained in Construction Permit 98110017, pursuant to which the EGU were constructed. The permitted emission rate is the applicable rate because it is between 0.15 lb/mmBtu and 0.055 lb/mmBtu, as provided by 35 IAC 217.762(a) (2).
 - B. The applicable heat input (mmBtu/control period) shall be the average of the two

highest heat inputs from the control periods four to six years prior to the year for which the allocation is being made, as provided by 35 IAC 217.762(b) (1).

6.1.9 Eligibility for NO_x Allowances from the New Source Set-Aside (NSSA)

- a. In 2004, 2005 and 2006, the budget EGU identified in Condition 6.1.2(a) will qualify as "new" budget EGU that commenced commercial operation prior to January 1, 2004. As such, the Permittee may be entitled to obtain NO_x allowances from the NSSA for these EGU without charge, as provided by 35 IAC 217.768.
- b. For the purpose of any such request for NO_x allowances, the NO_x emission rate shall be the permitted emission rate of these EGU as specified in Condition 6.1.8(b) (ii) and the projected heat input shall not exceed the average of the EGU's two highest seasonal heat inputs for the control periods one to three years prior to the allocation year, pursuant to 35 IAC 217.768(e).

6.1.10 Eligibility for Early Reduction Credits (ERC)

- a. The Permittee did not request NO_x allowances for the budget EGU identified in Condition 6.1.2(a) for early reductions in its NO_x emissions in the 2001 control period in accordance with 35 IAC 217.770.
- b.
 - i. The Permittee may pursue NO_x allowances for early reductions in NO_x emissions, i.e., reductions made during the 2002 and 2003 control period, as provided by 35 IAC 217.770.
 - ii. For the purpose of any such request, the NO_x emissions must have been reduced by at least 30 percent less than the permitted emission rate of these EGU as specified in Condition 6.1.8(b) (ii), pursuant to 35 IAC 217.770(c) (1).

6.1.11 Budget Permit Required by the NO_x Trading Program

- a. For this source, this segment of the CAAPP Permit, i.e., Section 6.1, is the Budget Permit required by the NO_x Trading Program and is intended to contain federally enforceable conditions addressing all applicable NO_x Trading Program requirements. This Budget Permit shall be treated as a complete and

segregable portion of the source's entire CAAPP permit, as provided by 35 IAC 217.758(a) (2).

- b. The Permittee and any other owner or operator of this source and each budget EGU at the source shall operate the budget EGU in compliance with this Budget Permit, pursuant to 35 IAC 217.756(b) (2).
- c. No provision of this Budget Permit or the associated application shall be construed as exempting or excluding the Permittee, or other owner or operator and, to the extent applicable, the account representative of a budget source or budget EGU from compliance with any other regulation or requirement promulgated under the CAA, the Act, the approved State Implementation Plan, or other federally enforceable permit, pursuant to 35 IAC 217.756(g).
- d. Upon recordation by USEPA under 40 CFR 96, Subpart F or G, or 35 IAC 217.782, every allocation, transfer, or deduction of an allowance to or from the budget units' compliance accounts or to or from the overdraft account for the budget source is deemed to amend automatically, and become part of, this budget permit, pursuant to 35 IAC 217.756(d) (8). This automatic amendment of this budget permit shall be deemed an operation of law and will not require any further review.
- e. No revision of this Budget Permit shall excuse any violation of the requirements of the NO_x Trading Program that occurs prior to the date that the revisions to this permit takes effect, pursuant to 35 IAC 217.756(f) (1).
- f. The Permittee, or other owner or operator of the source, shall reapply for a Budget Permit for the source as required by 35 IAC Part 217, Subpart W and Section 39.5 of the Act. For purposes of the NO_x Trading Program, the application shall contain the information specified by 35 IAC 217.758(b) (2).

6.2 Emissions Reduction Market System (ERMS)

6.2.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

6.2.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

6.3 Acid Rain Program

6.3.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Unit 1 with HSRG 1, Unit 2 with HSRG 2, Unit 3 with HSRG 3, Unit 4 with HSRG 4

Note: Title IV of the CAA, and other laws and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.3.2 Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. In particular, NO_x emissions of affected units shall not exceed the limit set by 40 CFR Part 76 as allowed by an Acid Rain Permit (See also Section 10). SO₂ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions. [Section 39.5(7)(g) and (17)(1) of the Act]

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.3.3 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75. [Section 39.5(7)(b) and 17(m) of the Act]

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO_x: Continuous Emissions Monitoring (40 CFR 75.12)

6.3.4 Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit. [Section 39.5(17) (l) of the Act]

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 3 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13) (e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.3.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan. [Section 39.5(17) (h) of the Act]
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements. [Section 39.5(7) (h) of the Act]

7.0 UNIT SPECIFIC CONDITIONS

7.1 Turbines (Subject to NSPS - 40 CFR Subpart GG) and Heat Recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR Subpart Da)

7.1.1 Description

The turbines are process emission units, and the HRSGs are fuel combustion emission units exhausted through a common stack, and are used to generate electricity. The turbines and HRSGs are powered by natural gas. NO_x emissions are controlled with dry low NO_x burners and selective catalytic reduction (SCR) systems.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 1	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	Dry Low NO _x Burners and SCR1
HRSG 1	Natural Gas Fired HRSG (350 mmBtu/hr)	SCR1
Unit 2	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	Dry Low NO _x Burners and SCR2
HRSG 2	Natural Gas Fired HRSG (350 mmBtu/hr)	SCR2
Unit 3	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	Dry Low NO _x Burners and SCR3
HRSG 3	Natural Gas Fired HRSG (350 mmBtu/hr)	SCR3
Unit 4	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	Dry Low NO _x Burners and SCR4
HRSG 4	Natural Gas Fired HRSG (350 mmBtu/hr)	SCR4

7.1.3 Applicability Provisions and Applicable Regulations

- a. i. An "affected turbine" for the purpose of these unit-specific conditions, is a turbine described in Conditions 7.1.1 and 7.1.2.
- ii. An "affected HRSG" for the purpose of these unit-specific conditions, is a HRSG described in Conditions 7.1.1 and 7.1.2.
- b. The affected turbines and affected HRSGs are subject to the emission limits identified in Condition 5.2.2.
- c. i. The affected turbines are subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subparts A and GG, because the heat input at peak load is equal to or greater than 10.7

gigajoules per hour (10 mmBtu/hr), based on the lower heating value of the fuel fired and the affected turbines commenced construction, modification, or reconstruction after October 3, 1977. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

A. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.332(b), electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of 40 CFR 60.332(a)(1). Pursuant to 40 CFR 60.332(a)(1), no owner or operator of an affected turbine shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NO _x percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04 (N)
$0.1 < N \leq 0.25$	$0.04 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

Where:

N = The nitrogen content of the fuel
(percent by weight) determined in
according with Condition 7.1.8.

B. Standard for Sulfur Dioxide

I. No owner or operator of an affected turbine shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)].

II. No owner or operator of an affected turbine shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

ii. The affected HRSGs are subject to the NSPS for Electric Utility Steam Generating Units, 40 CFR 60 Subparts A and Da, because the construction, modification, or reconstruction is commenced after September 18, 1978 and is capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee must comply with 40 CFR 60.49a, which is addressed in Condition 7.1.10.

A. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.44(a)(d)(1), no new source owner or operator shall cause to be discharged into the atmosphere from any affected HRSG for which construction commenced after July 9, 1997 any gases which contain nitrogen oxides (expressed as NO₂) in excess of 200 nanograms per joule (1.6 pounds per megawatt-hour) gross energy output, based on a 30-day rolling average, except as provided under 40 CFR 60.46a(k)(1).

B. Standard for Sulfur Dioxide

Pursuant to 40 CFR 60.43(a)(b)(2), no owner or operator shall cause to be discharged into the atmosphere from any affected HRSG which combusts liquid or gaseous fuels, any gases which contain sulfur dioxide in excess of 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/million Btu) heat input.

C. Standard for Particulate Matter

Pursuant to 40 CFR 60.42(a)(1), no owner or operator of an affected HSRG shall cause to be discharged into the atmosphere from that affected HSRG any gases that contain particulate matter in excess of (0.03 lb/million Btu) heat input derived from the combustion of solid, liquid, or gaseous fuel.

D. Standard for Opacity

Pursuant to 40 CFR 60.42(b), no owner or operator of an affected HSRG shall cause to be discharged into the atmosphere from that affected HSRG any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

- d. i. A. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm [35 IAC 214.301].
- e. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 10 mmBtu/hr to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- f. No person shall cause or allow the emission of nitrogen oxides (NOX) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmBtu/hr) to exceed the following standards and limitations:

- i. For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmBtu) of actual heat input [35 IAC 217.121(a)].
- i. During each ozone control period (May 1 through September 30) the emissions of NO_x from an affected turbine and affected HRSG shall not exceed 0.25 lb/mmBtu of actual heat input based on a ozone control period average, for that unit, pursuant to 35 IAC 217.706(a).

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO_x for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO_x Trading Program.

Note: These provisions are not intended to prevent the Illinois EPA from developing streamlined approaches for compliance the affected turbines and affected HRSGs, which function in series with the exhaust through each affected HRSG, with Subpart GG and Da of the NSPS respectively.

j. Startup Provisions

The Permittee is authorized to operate an affected turbine and/or affected HRSG in violation of the applicable standards in Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.1.6 during startup subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

- i. This authorization only extends for a period of up to 2-hours following initial firing of fuel for each startup event.
- ii. The Permittee shall take the following measures to minimize emissions resulting from startups, the duration of startups, and minimize the frequency of startups:
 - A. Operating in accordance with the manufacturer's written operating and startup procedures, including a pre-check of the unit, or other written procedures developed and maintained by the Permittee so as to minimize the duration of

startups and the emissions associated with startups. These procedures should allow for review of operating parameters of the unit during startup, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions.

B. Maintaining units in accordance with written procedures developed and maintained by the Permittee so as to minimize the duration of startups and the frequency of startups. These maintenance practices shall include maintenance activities before the unit is started up, when the unit is in operation, and when the unit is shut down.

C. The procedures described above shall be reviewed at least annually to make necessary adjustments and shall be made available to the Illinois EPA upon request.

iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.1.9(1).

k. Malfunction and Breakdown Provisions

In the event of a malfunction or breakdown of an affected turbine and/or affected HRSG, the Permittee is authorized to continue operation of the affected turbine and/or affected HRSG in violation of the applicable requirement of Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.1.6, as necessary to provide essential service, i.e. prevent interruption in or shortage of the public's electricity supply, provided that operation shall not be continued solely for the economic benefit of the Permittee or to prevent risk of injury to personnel or severe damage to equipment. This authorization is subject to the following requirements:

- i. The Permittee shall repair the damaged feature(s) of the affected turbine and/or affected HRSG or remove the affected turbine and/or affected HRSG from service as soon as practicable.
- ii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.1.9(m) and 7.1.10(d).

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on an affected turbine not being subject to the requirements of 35 IAC 212.321 or 212.322, because due to the unique nature of such unit, a process weight rate can not be set so that such rules can not reasonably be applied.
- b. An affected turbine is not subject to 35 IAC 217.141, because an affected turbine is not by definition a fuel combustion unit.
- c. An affected turbine is not subject to 35 IAC 216.121, because an affected turbine is not by definition a fuel combustion unit.
- d. The provisions of 35 IAC 218.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 218.303].
- e. The control requirements of 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].

7.1.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected turbine and affected HRSG in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. Conditions 7.1.5(e), (f), (g), and (h) represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act as established in Permit 98110017 for the affected turbines [T1].
- c. Natural gas shall be the only fuel in the affected turbines.
- d. Natural gas shall be the only fuel in the affected HRSGs.
- e. Each affected turbine shall be equipped, operated, and maintained with dry low NO_x combustors, and each

affected HRSG shall be equipped, operated, and maintained with a selective catalytic reduction (SCR) system to reduce emissions of NO_x.

- f. The emissions of NO_x from each affected turbine/HRSG when firing natural gas shall not exceed 4.5 ppmv at 15% O₂ on an hourly average, except during startup, malfunction or shutdown.
- g. i. Each affected turbine and affected HRSG shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NO_x during startup, malfunction, and shutdown including:
 - A. Operation in accordance with the manufacturer's written instructions or other written instructions developed by the Permittee;
 - B. Review of operating parameters of the unit during startup, malfunction, and breakdown, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions.
 - C. Operation of the SCR system as soon as and as long as the unit operating conditions are amenable to its effective use.
- h. Upon malfunction of the SCR system that will result in NO_x emissions in excess of Condition 7.1.5(e).
 - i. The Permittee shall as soon as practicable repair the affected system or remove the affected turbine or affected HRSG from service so that excess emissions cease.
 - ii. Consistent with the above, the Permittee shall begin shutdown of the affected turbine or affected HRSG within 90 minutes, unless the malfunction is expected to be repaired in 120 minutes or such shutdown would threaten the stability of the regional electrical power system. In such case, shutdown of the affected turbine and affected HRSG shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown would not endanger the regional power system. In no case shall shutdown of a affected turbine or affected HRSG be delayed solely for the economic benefit of the Permittee.

- i. Each affected turbine may be constructed as a simple cycle turbine and operated subject to the following requirements until an associated affected HRSG has been installed:
 - i. After initial startup, commissioning and shakedown are completed, an affected turbine shall only be operated for electrical generation during peak demand periods or for purpose of evaluating or verifying operation, or emissions testing.
 - ii. The combined operation of all affected simple cycle turbine shall not exceed 1,048 hours per year or NO_x emissions of 99 tons per year.
 - iii. Each affected turbine shall be equipped, operated, and maintained with dry low NO_x combustors.
 - iv. The emissions of NO_x from each affected turbine shall not exceed 25 ppmv at 15% O₂ on an hourly average, except during startup and shutdown as addressed by Condition 7.1.5(f) and 7.1.5(g).
 - v. The affected turbines shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM.
- j. For the purposes of this permit, electrical generation during peak demand periods means operation when electrical demand from consumers is greatest (typically daylight and evening hours on hot summer days) and when other base load generating capacity is not sufficient for demand (typically due to scheduled unit outages for maintenance, unscheduled unit outages, and interruption in the power distribution systems. It also includes operation of a unit related to such operation for purposes of verifying unit availability. This mode of operation is distinguished from base load operation, in which a unit operates 24 hours per day, for days or weeks at a time, year around, with periodic outages for maintenance or repair.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected turbines and affected HRSGs are subject to the following:

- a. Emissions from the affected turbines and affected HRSGs shall not exceed the following limits:

Without Duct Burners ³		
<u>Pollutant</u>	<u>(Lb/mmBtu ¹)</u>	<u>(Lb/Hour²)</u>
NO _x	0.0166	36.0
CO	0.0511	93.8
PM/PM ₁₀	0.0180	36.7
VOM	0.0094	17.3
SO ₂	0.0060	13.4

1. Limit based on vendor/manufacture data and information provided in the permit application. These limits only apply in the maximum load range of the affected turbines and affected HRSGs.
2. Limit based on modeling data and information provided in the permit application. These limits apply at all times, except the limit on CO and VOM, which do not apply below 75% load. CO and VOM emissions between 50% and 75% load shall not exceed 541 and 30 lb/hour, respectively.
3. Emission limits are per unit.

With Duct Burners ³		
<u>Pollutant</u>	<u>(Lb/mmBtu¹)</u>	<u>(Lb/Hour²)</u>
NO _x	0.0143	36.0
CO	0.0626	136.7
PM/PM ₁₀	0.0183	43.9
VOM	0.0162	35.3
SO ₂	0.0060	15.6

1. Limit based on vendor/manufacture data and information provided in the permit application. These limits only apply in the maximum load range of the affected turbines and affected HRSGs.
2. Limit based on modeling data and information provided in the permit application. These limits apply at all times, except the limit on CO, which does not apply below 75% load. CO emissions shall not exceed 541 lb/hour between 50% and 75% load.

3. Emission limits are per unit.

<u>Pollutant</u>	<u>Annual Emissions</u> ²	
	<u>Contribution</u>	<u>(Ton/Yr)</u> ¹
NO _x	157.7	630.7
CO	864.1	3,456.4
PM/PM ₁₀	192.3	769.1
VOM	154.6	618.4
SO ₂	68.3	273.3

1. The annual limits for NO_x, PM/PM₁₀, VOM, and SO₂ are based on continuous operation at the maximum hourly emission rate. The CO annual limit was determined based on maximum emissions considering operation at reduced load (50% load) for 15% of the time.

2. Emission limits are per unit.

- b. Emissions from the affected turbines shall not exceed the following limits if operated as a simple cycle turbine pursuant to Condition 7.1.5(i):

<u>Pollutant</u>	<u>Simple Cycle Emissions Limits</u> ⁴			
	<u>Each</u> <u>(Lb/mmBtu)</u> ¹	<u>Each</u> <u>(Lb/Hour)</u> ²	<u>Each</u> <u>(Ton/Yr)</u> ³	<u>Total</u> <u>(Ton/Yr)</u> ³
NO _x	0.0936	188.7	24.7	98.9
CO	0.0449	83.6	19.8	79.0
PM/PM ₁₀	0.0182	36.7	4.8	19.2
VOM	0.0099	18.5	2.7	10.6
SO ₂	0.006	12.5	1.6	6.6

1. Limit based on vendor/manufacture data and information provided in the permit application. These limits only apply in the maximum load range of the affected turbines and affected HRSGs.
2. Limit based on modeling data and information provided in the permit application. These limits apply at all times, except the limit on CO and VOM, which does not apply below 75% load. CO and VOM emissions between 50% and 75% load shall not exceed 541 and 30 lb/hour, respectively.
3. The limits for NO_x, PM/PM₁₀, VOM, and SO₂ are based on operation for 1,048 hours/year at the maximum hourly emission rate. The limit for CO and VOM were determined based on maximum

emissions considering operation at reduced load (15% load) for 15% of the time.

4. Emission limits are per unit.
- c. On a daily basis, VOM emissions from the affected turbines and/or the affected turbines and affected HRSGs shall not exceed 3,725 pounds, total, unless a lower limit applies as set forth below.
 - i. After VOM emissions testing is completed in accordance with Condition 12 of Construction Permit 98110017, VOM emissions from the affected turbines and/or the affected turbines and affected HRSGs during the ozone season (May through September) shall not exceed 3000 pounds/day, if such testing demonstrates that such limit can be consistently achieved by use of good combustion practices or an intermediate limit (between 3,000 pounds/day and 3,725 pounds/day) set by the Illinois EPA based on such testing as it demonstrates that such an intermediate limit can be consistently achieved. These requirements are set to address the impact of the facility's VOM emissions on ozone air quality.
- d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- e. The above limitations were established in Permit 98110017 [T1].

7.1.7 Testing Requirements

- a.
 - i. The affected turbines shall comply with the applicable testing requirements of 40 CFR 60.335.
 - ii. The affected HRSGs shall comply with the applicable testing requirements of 40 CFR 60.47(a) (h).

7.1.8 Monitoring Requirements

- a.
 - i. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60 Subpart GG shall install and operate a continuous monitoring system to monitor and record the fuel consumption in the affected turbines [40 CFR 60.334(a)].

- ii. The affected turbines shall comply with the applicable monitoring requirements of 40 CFR 60.334(b) except monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the affected turbines, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciable to NO_x emissions.
- b. The affected HRSGs shall comply with the applicable monitoring requirements of 40 CFR 60.47(a).
 - i. Pursuant to 40 CFR 60.47a(o), the owner or operator of a duct burner, as described in 40 CFR 60.41a, which is subject to the NO_x standards of 40 CFR 60.44a(a)(1) or (d)(1) is not required to install or operate a continuous emissions monitoring system to measure NO_x emissions; a wattmeter to measure gross electrical output; meters to measure steam flow, temperature, and pressure; and a continuous flow monitoring system to measure the flow of exhaust gases discharged to the atmosphere.
- c.
 - i. The Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system on the affected turbines and/or affected HRSGs to measure emissions of NO_x. The applicable procedures under 40 CFR 75.12 and 40 CFR 75, subpart H shall be followed for the installation, evaluation, and operation of this NO_x CEM system. This monitoring system shall be operational through startup and shutdown of the affected turbines and affected HRSGs.
 - ii. The Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system on the affected turbines and affected HRSGs to measure emissions of SO₂ according to the applicable procedures under 40 CFR 75.11(d), or the Permittee shall conduct fuel monitoring for fuels fired in the affected turbines and affected HRSGs according to the procedures in 40 CFR 75, Appendix D.
 - iii. A. Pursuant to 35 IAC 217.710(a), the Permittee, shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for the measurements of NO_x from the affected turbines and affected HRSGs, in

accordance with the requirements of 40 CFR 75 Subpart B.

- B. Notwithstanding Condition 7.1.8(c) (iii) (A), the Permittee of an affected turbine and affected HRSG that operates less than 350 hour per ozone control period may determine the heat input and NO_x emissions of the turbine and affected HRSG as follows [35 IAC 217.710(c)]:
- I. Heat input shall be determined from the metered fuel usage to the affected turbine and affected HRSG or the calculated heat input determined as the product of the affected turbine's and affected HRSG's maximum hourly heat input and hours of operation as recorded by operating instrumentation on the affected turbine and affected HRSG [35 IAC 217.710(c) (1)].
 - II. NO_x emissions shall be determined as the product of the heat input as determined in Condition 7.1.8(c) (iii) (B) (I) and emission factors of 1.2 lbs/mmBtu for fuel oil and 0.7 lbs/mmBtu for natural gas [35 IAC 217.710(c) (2)].

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected turbines and affected HRSGs to demonstrate compliance with Conditions 5.5.1, 7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7) (b) of the Act:

- a. A maintenance and repair log for each affected turbine and affected HRSG, listing activities performed with date.
- b. The sulfur content of the fuel fired in the affected turbines and affected HRSGs.
- c. Fuel consumption for the affected turbines and affected HRSGs, scf/day and scf/year.
- d. Operating hours for the affected turbines and affected HRSGs, hr/day and hr/year.

- e. Heat content of the fuels being fired in the affected turbines and affected HRSGs.
- f. Identification of each hour when a turbine is operated at less than 75% load, other than during startup, malfunction, or shutdown.
- g. A maintenance and repair log for each SCR and SCR reagent storage system, listing activities performed with date.
- h. The Permittee shall keep the following records with regards to emissions:
 - i. NO_x emissions from each affected turbine and affected turbine/HRSG recorded hourly, quarterly, and annual (in lb/mmBtu) by combining the NO_x concentration (in ppm) and diluent concentration (in percent O₂ or CO₂) measurements according to the procedures in 40 CFR 75 Appendix F;
 - ii. Monthly emissions of NO_x, CO, SO₂, VOM, and PM from each affected turbine, and affected turbine/HRSGs and fuel heater (ton/month). NO_x emissions shall be based on data from the CEM. All other emissions shall be calculated based on fuel consumption data and site-specific emission factors developed from emission test data; and
 - iii. Annual plant emissions of NO_x, CO, SO₂, VOM, and PM, based on monthly emission totals.
- i. Emissions of each pollutant from the affected turbines and affected HRSGs, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/yr.
- j. The Permittee shall maintain the following if required:
 - i. Any periods during which a continuous monitoring system was not operational, with explanation.
 - ii. Any day in which emission and/or opacity exceeded an applicable standard or limit.
- k. The owner or operator of an affected turbine and affected HRSG subject to the requirements of Condition 7.1.3(i) (35 IAC 217 Subpart V) shall:

- i. Comply with the recordkeeping and reporting requirements of 40 CFR 75 applicable to NO_x emissions during the ozone control period, including, but not limited to, 40 CFR 75.54(b) and (d) [35 IAC 217.712(a)].
- ii. Notwithstanding 35 IAC 217.712(a) above, the owner or operator of a combustion turbine for which heat input and NO_x emissions are determined pursuant to 35 IAC 217.710(c) (Condition 7.1.8(c)(iii)) shall comply with the following recordkeeping and reporting requirements [35 IAC 217.712(b)]:
 - A. Maintain records of the heat input and NO_x emissions of the turbine as determined in accordance with 35 IAC 217.710(c), and records of metered fuel use or operating hours used to determine heat input [35 IAC 217.712(b)(1)].

1. Records for Startup

The Permittee shall maintain the following records, pursuant to Section 39.5(7)(b) of the Act, for each affected turbine and/or affected HRSG subject to Condition 7.1.3(j), which at a minimum shall include the following information for each startup:

- i. Date and duration of the startup, i.e., start time and time normal operation achieved.
- ii. If normal operation was not achieved within 2-hours, an explanation why startup could not be achieved.
- iii. An explanation why established startup procedures could not be performed, if not performed.
- iv. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal.
- v. Whether exceedance of Condition 5.2.2 may have occurred during startup, with explanation and estimated duration (minutes).

m. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected

turbine and/or affected HRSG during malfunctions and breakdown, which as a minimum, shall include:

- i. Date and duration of malfunction or breakdown.
- ii. A detailed explanation of the malfunction or breakdown.
- iii. An explanation why the damaged feature(s) could not be repaired as soon as practicable or the affected turbine and/or affected HRSG could not be removed from service without risk of injury to personnel or severe damage to equipment.
- iv. The measures used to reduce the quantity of emissions and the duration of the event.
- v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- vi. The amount of release above typical emissions during malfunction/breakdown.

7.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected turbine and/or affected HRSG with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
 - i. Notification within 30 days for operation of an affected turbine and/or affected HRSG that was not in compliance with applicable requirements of Section 7.1.3, 7.1.5, and 7.1.6.
- b. The affected turbines and affected HRSGs shall comply with the applicable quarterly reporting requirements of 40 CFR 60.7(c) and 60.334(c).
- c. The Permittee shall submit a report by November 30 of each year, to the Illinois EPA that demonstrates that each affected turbine and/or affected HRSG has complied with Condition 7.1.3(i). These reports shall be accompanied by a certification statement signed by a responsible official for the Permittee as specified by 35 IAC 217.712(c), pursuant to 35 IAC 217.712(c), (d), and (e). This report shall contain the information specified by 35 IAC 217.712(d)

including the heat input and NO_x emissions of the affected turbine for the ozone control period.

d. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected turbine during malfunction or breakdown.

i. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.

ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected turbine was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected turbine was taken out of service.

e. The affected HRSGs shall comply with the applicable reporting requirements of 40 CFR 60.49(a).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with Condition 7.1.3(c)(i)(A) and (B) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9.

b. Compliance with Condition 7.1.3(c)(ii)(A) and (B) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9. The Permittee is subject to the requirements of 40 CFR 60.46(a)(i) and (k).

c. Compliance with Condition 7.1.3(c)(ii)(C) and (D) is considered to be assured by the normal work practices

and maintenance activities inherent in operation of the affected HRSGs.

- d. Compliance with Condition 7.1.3(d) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9, as well as the proper operating conditions of the affected turbines.
- e. Compliance with Condition 7.1.3(e) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected HRSGs.
- f. Compliance with Condition 7.1.3(f) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9.
- g. Compliance with Condition 7.1.3(i) is demonstrated by the monitoring requirements of 7.1.8, the records required in Condition 7.1.9, and the reporting requirements of 7.1.10.
- h. Compliance with the emission limits in Conditions 5.5 and 7.1.6 shall be determined by using published emission factors, Illinois EPA approved stack test data, Illinois EPA approved measured emission factors, or approved manufacturer's data and the recordkeeping requirements in Condition 7.1.9.

7.2 Heater

7.2.1 Description

The heater is a fuel combustion emission unit used to increase the temperature of the natural gas entering the combustion turbine. The heater is powered by natural gas. NO_x emissions are controlled with low NO_x burners.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
GHS-1	Natural Gas Fired Heater (15.0 mmBtu/hr)	Low NO _x Burners

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected heater" for the purpose of these unit-specific conditions, is a heater described in Conditions 7.2.1 and 7.2.2.
- b. The affected heater is subject to the emission limits identified in Condition 5.2.2.
- c. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 10 mmBtu/hr to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected heater not being subject to the following New Source Performance Standards (NSPS) for steam generators because the affected heater by definition is a process heater, and thus not included in the definition of steam generating unit.
- b. The provisions of 35 IAC 2188.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 2188.303].
- c. The control requirements of 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].
- d. The affected heater is not subject to the requirements of the NO_x Compliance Programs of 35 IAC Part 217 because the affected heater has a nameplate capacity less than 25 MWe.

- e. The affected heater not subject to the requirements of the NO_x Compliance Programs of 35 IAC Part 217 because the affected heater does not currently serve a generator with a nameplate capacity of greater than 25 Mwe.
- f. The affected heater is not subject to the requirements of the Acid Rain Program of 40 CFR 72 because the affected heater does not currently serve a generator with a nameplate capacity of greater than 25 Mwe.
- g. This permit is issued based on the affected heater not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected heater does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected heater in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- b. Conditions 7.1.5(d) represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act as established in Permit 98110017 for the affected turbines [T1].
- c. Natural gas shall be the only fuel fired in the affected heater.
- d. The affected heater shall be equipped, operated, and maintained with low NO_x burners to control NO_x emissions that are designed to emit no more than 0.15 lb NO_x/million Btu heat input (HHV) on an hourly average.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected heater is subject to the following:

- a. Emissions from the affected heater shall not exceed the following limits:

<u>Pollutant</u>	<u>(Lb/Hour)</u>	<u>(Ton/Year)</u>
NO _x	6.5	28.6
CO	--	28.6
PM	--	2.4
VOM	--	4.4
SO ₂	--	1.3

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- c. The above limitations were established in Permit 98110017 [T1].

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected heater to demonstrate compliance with Conditions 5.5.1, 7.2.3, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. A maintenance and repair log for the affected heater, listing activities performed with date.
- b. The sulfur content of the fuel fired in the affected heater.
- c. Fuel consumption for the affected heater, scf/month and scf/year.
- d. Operating hours for the affected heater, hr/month and hr/year.
- e. Heat content of the fuel being fired in the affected heater.
- f. Emissions of each pollutant from the affected heater, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/yr.

- g. The Permittee shall maintain the following if required:
 - i. Any day in which emission and/or opacity exceeded an applicable standard or limit.

7.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected heater with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
 - i. Notification within 30 days for operation of an affected heater that was not in compliance with applicable requirements of Section 7.2.3, 7.2.5, and 7.2.6.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(c) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected heater.
- b. Compliance with the emission limits in Conditions 5.5 and 7.2.6 shall be determined by using published emission factors, Illinois EPA approved stack test data, Illinois EPA approved measured emission factors, or approved manufacturer's data and the recordkeeping requirements in Condition 7.2.9.

7.3 Cooling Towers

7.3.1 Description

The cooling towers are process emission units used to provide equipment cooling.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
T1-T18	Cooling Tower Cells	Drift Eliminators

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected cooling tower" for the purpose of these unit-specific conditions, is a cooling tower described in Conditions 7.3.1 and 7.3.2.
- b. The affected cooling towers are subject to the emission limits identified in Condition 5.2.2.

7.3.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on an affected cooling tower not being subject to the requirements of 35 IAC 212.321 or 212.322, because due to the unique nature of such unit, a process weight rate can not be set so that such rules can not reasonably be applied.

7.3.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected cooling tower in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- b. The cooling towers shall each be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the cooling towers to not more than 0.001% of the circulating water flow.
- c. Good operating practices shall be followed for the cooling towers to maintain the level of dissolved

solids in the cooling towers blowdown to not more than 5,750 mg/l, composite daily sample.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected cooling towers are subject to the following:

- a. Annual emissions of PM from the affected cooling towers, in total, shall not exceed 30.2 tons/yr.
- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- c. The above limitations were established in Permit 98110017 [T1].

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected cooling towers to demonstrate compliance with Conditions 5.5.1, 7.3.3, 7.3.5, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. A maintenance and repair log for each affected cooling tower, listing activities performed with date.
- b. Cooling water drift rate, gallons/hour, based on representative operation of the cooling tower.
- c. Cooling water total dissolved solids (TSD) content, based on representative sampling of water discharge.
- d. Actual cooling tower operating hours, hours/month.
- e. A maintenance and repair log for each cooling tower drift eliminators, listing activities performed with date.
- f. Emissions of each pollutant from the affected cooling towers, including emissions from startups, with

supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/yr.

7.3.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected cooling tower with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
 - i. Notification within 30 days for operation of an affected cooling tower that was not in compliance with applicable requirements of Section 7.3.3, 7.3.5, and 7.3.6.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3(b) is demonstrated by proper operating conditions of the affected cooling towers.
- b. Compliance with the emission limits in Condition 7.3.6 shall be determined by using Illinois EPA approved published emission factors such as AP-42, Illinois EPA approved stack test data results, Illinois EPA approved measured emission factors, or Illinois EPA approved manufacturer's data and the recordkeeping requirements in Condition 7.3.9.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____ **{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 5.2. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
 - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15) (a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15) (b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7) (o) (v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Name:

Official Title:

Telephone No.:

Date Signed:

10.2 Attachment 2 - Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit Form (CAAPP Form-199).

Application For A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

10.3 Attachment 3 - Acid Rain Program Permit

217-782-2113

**ACID RAIN PROGRAM
PHASE II PERMIT**

August 8, 2003

SP - Kendall Energy, LLC
Attention: Mr. Jim Idzorek, Designated Representative
C/O LSP - Kendall Energy, LLC
1401 County Line Road
Minooka, Illinois 60447

Oris No.: 55131
IEPA ID No.: 093808AAD
Source/Unit: Kendall Co. Generating Station/ GTGZ1 through GTGZ4 @ Minooka
Date Received: May 27, 1999 and August 8, 2003
Date Issued:
Effective Date : January 1, 2000
Expiration Date: December 31, 2004

STATEMENT OF BASIS:

In accordance with Section 39.5(17)(b), Title IV; Acid Rain Provisions, of the Illinois Environmental Protection Act [415 ILCS 5/1 et Seq.] and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program Phase II permit for the LSP - Kendall Energy, LLC.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDE (NO_x) REQUIREMENTS FOR EACH AFFECTED UNIT:

		2000	2001	2002	2003	2004
UNITS GTGZ1, GTGZ2, GTGZ3 & GTGZ4	SO ₂ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	N/A	N/A	N/A	N/A	N/A
	NO _x limit	These units are not subject to a NO _x emissions limitation under 40 CFR part 76.				

The construction permit # 98110017 issued by Illinois EPA contains provisions related to sulfur dioxide (SO₂) emissions. The acid rain permit also contains provisions related to sulfur dioxide (SO₂) emissions and requires the owners and operators to hold SO₂ allowances to account for SO₂ emissions beginning in the year 2000. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. Although this plant was not eligible for an allowance allocated by USEPA, the owners or operators may obtain SO₂ allowances to cover emissions from other sources under a marketable allowance program.

COMMENTS, NOTES AND JUSTIFICATIONS:

This permit does not affect the LSP - Kendall Energy, LLC's responsibility to meet all other applicable local, state, and federal requirements, including requirements addressing NO_x emissions.

PERMIT APPLICATION: The SO₂ allowance requirements and other standard requirements are attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

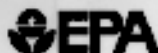
If you have any questions regarding this permit, please contact Shashi Shah at 217-782-7395.

(ORIGINAL SIGNED BY DONALD E. SUTTON)

Donald E. Sutton, P.E.
Manager, Permits Section
Division of Air Pollution Control

DES:SRS:G:\utltygrp\Acid Rain\P2AcidRainPT\LSPKendall\PTLSPKendallasFinal.doc

cc: Cecilia Mijares, USEPA Region V
IEPA Region 1



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2010-0258

Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.10 and 72.31

This submission is: ☒ New ☐ Revised

MAY 27 1999

IEPA - DAPC - SPFLD

STEP 1
Identify the source by
plant name, state, and
ORIS code.

Randall County Generation Facility	Illinois	55131
Plant Name	State	ORIS Code

STEP 2
Enter the unit ID#
for each affected
unit, and indicate
whether a unit is
being repowered
and the repowering
plan being reviewed
by entering "yes" or
"no" at column c. For
new units, enter the
requested information
in columns d and e.

Compliance Plan				
a	b		d	e
Unit ID#	Unit Will Hold Allow- ances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes	No	03/01/2001	06/01/2001
2	Yes	No	03/01/2001	06/01/2001
3	Yes	No	03/01/2001	06/01/2001
4	Yes	No	03/01/2001	06/01/2001
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3
Check the box if the
response in column c
of Step 2 is "Yes"
for any unit.

☐ For each unit that is being repowered, the Repowering Extension Plan form is included.

STEP 4
Read the standard
requirements and
certification, enter
the name of the
designated repre-
sentative, and sign
and date

Standard Requirements

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 72.54); (ii) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (iii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.5(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.5(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on file at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24, provided that the certificate and documents shall be retained on file at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Kendall County Generation Facility
Plant Name (from Step 1)

Phase II Permit - Page 3

Locality.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 75.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which this submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Michael A. Witzing	
Signature Michael A. Witzing	Date 5/31/99

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

LSP Kendall Energy, LLC is located at 1401 County Line Road. The source utilizes four natural gas turbines with heat recover steam generators (HRSG) to generate electricity. In addition, the turbines and HRSGs control NO_x with low NO_x burners and selective catalytic reduction (SCR) systems.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 1	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR1
HRSG 1	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR1
Unit 2	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR2
HRSG 2	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR2
Unit 3	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR3
HRSG 3	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR3
Unit 4	197 MW Natural Gas Fired Turbine (2116 mmBtu/hr)	June 1999	Dry Low NO _x Burners and SCR4
HRSG 4	Natural Gas Fired HRSG (350 mmBtu/hr)	June 1999	SCR4
GHS-1	Natural Gas Fired Heater (15.0 mmBtu/hr)	June 1999	Low NO _x Burners
T1-T18	Cooling Tower Cells	June 1999	Drift Eliminators

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Pollutant	Tons/Year
Volatile Organic Material (VOM)	474.35
Sulfur Dioxide (SO ₂)	216.04
Particulate Matter (PM)	590.08
Nitrogen Oxides (NO _x)	611.93
HAP, not included in VOM or PM	---
Total	1892.4

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

Because this source is located in the Chicago ozone non-attainment area and emits volatile organic material (VOM), the source must comply with Illinois' Emissions Reduction Market System (ERMS). The ERMS is a market-based program designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as further described in Section 6.0 of the permit. The permit contains provisions restricting the seasonal emissions of VOM from the source to less than 10 so that this source does not qualify as a participating source and does not have to hold allotment trading units for its emissions.

This source will be an affected source subject to the NO_x Trading Program. This is a new interstate market-based program designed to reduce NO_x emissions from electric power plants and other large NO_x sources beginning in 2004. One of the administrative requirements of this permit for an affected source is to hold a "budget permit," which sets forth the various requirements of the NO_x Trading Program that would apply to the affected source. The Illinois EPA is proposing to include this budget permit in Section 6.0 of this CAAPP.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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